Application Note

Using !NexusMap to check your cluster configuration

The **!NexusMap** utility (in directory **Utilities** on the Nexus Networking Disc 2 floppy disc) will always show you the actual configuration of your Nexus installation, including all powered-on computers. For a single Nexus cluster typical output is as shown below:

```
NexManage version 0.29 (22 Apr 1994)

Scan started at  Thu,14 Jul 1994.11:31:14
Scan finished at Thu,14 Jul 1994.11:31:15

Cluster 00:00:01:00:02:xx (Sharer 70538; Econet 11)

01          Disc sharer version 2.16
            Drive 0 (173Mb): FUJITSU M2614S 0607
  40        Router version 0.95
    44      Archimedes version 3.20, station 68
    48      Archimedes version 3.20, station 72
    4C      Archimedes version 3.20, station 76
  50        Hub version 0.95
    54      Archimedes version 3.20, station 84
    5C      BEN version 2.10, on Econet 1
            Remote nets:   1  47  50  64 102 105
  60        Router version 0.95
  70        Router version 0.95

Disc sharer:        1 × 2.16
Hub:                1 × 0.95
Router:             2 × 0.95
BEN:                1 × 2.10
Archimedes:         4 × 3.20

A3020 network:      1 × 2.18
Standard Mk.1:      1 × 2.17, 1 × 2.18, 1 × 2.20
```

This output can be used to ensure the correct Cluster Map is set up within !PartEdit (the **Show Cluster** option). If the !NexusMap output gives information on more than one cluster you will have to separate out the information relating to the disc sharer whose cluster map you are editing. This is simple to do since the data for each cluster starts with the **Cluster** line which includes the disc sharer serial number (this serial number can be found on the back of the disc sharer). On the above example the relevant information is:

```
01          Disc sharer version 2.16
            Drive 0 (173Mb): FUJITSU M2614S 0607
  40        Router version 0.95
    44      Archimedes version 3.20, station 68
    48      Archimedes version 3.20, station 72
    4C      Archimedes version 3.20, station 76
  50        Hub version 0.95
    54      Archimedes version 3.20, station 84
    5C      BEN version 2.10, on Econet 1
            Remote nets:   1  47  50  64 102 105
  60        Router version 0.95
  70        Router version 0.95
```

Connections to each Router/Hub

Connections to the disc sharer; always‡ four connections, numbered 40, 50, 60, 70†.

‡If there is no connection to a port it will be missing from the list.
†These numbers are in hexadecimal, often indicated by an & prefix. &40 = 64, &50 = 80, &60 = 96, &70 = 112

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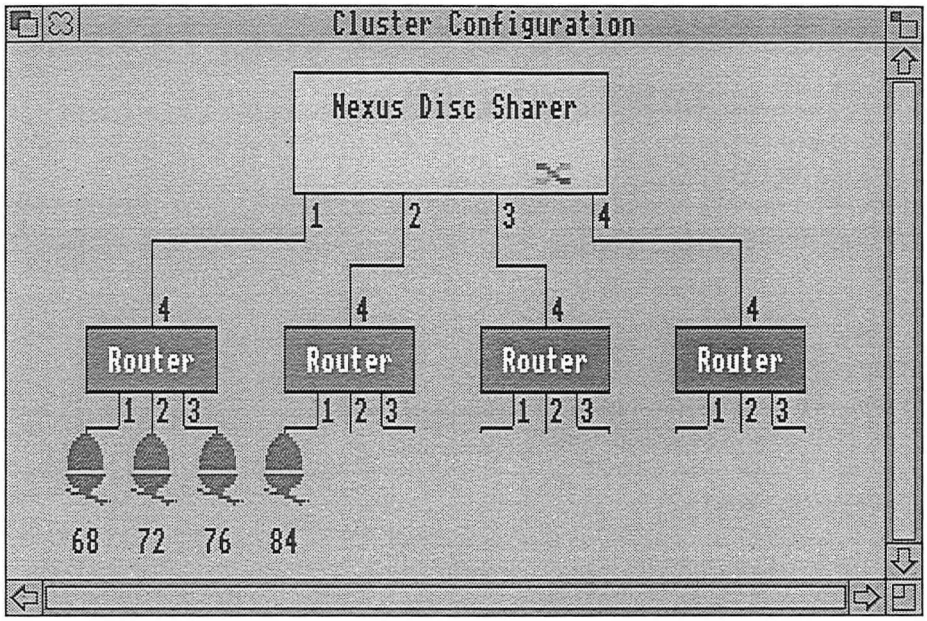
The Cluster Map (as shown within PartEdit) for this configuration is:

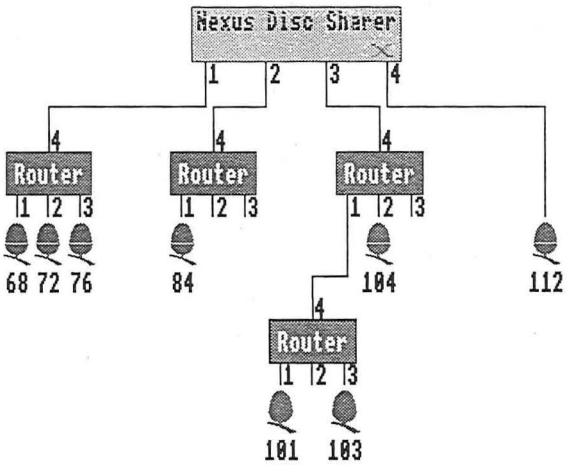


It should be apparent how this relates to the textual map given above; notice how the station numbers printed below the "Acorn" computers on the diagram are the station numbers given in the textual map. Notice also that the PartEdit Cluster Map makes no distinction between the Hub and the Routers; also the Cluster Map does not need to know the location of any BEN or Nexus file server (its only concern is the allocation of the Nexus disc sharer's 12 private read/write disc partitions to the connected computers).

Some further examples of textual maps, with *representations* of the corresponding PartEdit Cluster Maps, are given below:

```
01          Disc sharer version 2.16
            Drive 0 (173Mb): FUJITSU M2614S 0607
  40        Router version 0.95
    44      Archimedes version 3.20, station 68
    48      Archimedes version 3.20, station 72
    4C      Archimedes version 3.20, station 76
  50        Hub version 0.95
    54      Archimedes version 3.20, station 84
    5C      BEN version 2.10, on Econet 1
            Remote nets:   1  47  50  64 102 105
  60        Router version 0.95
    64      Router version 0.95
      65    Archimedes version 3.20, station 101
      67    Archimedes version 3.20, station 103
    68      Archimedes version 3.20, station 104

  70        Archimedes version 3.20, station 112
```



Connections to 'Second Level' Routers

Connections to each Router/Hub

Connections to the disc sharer

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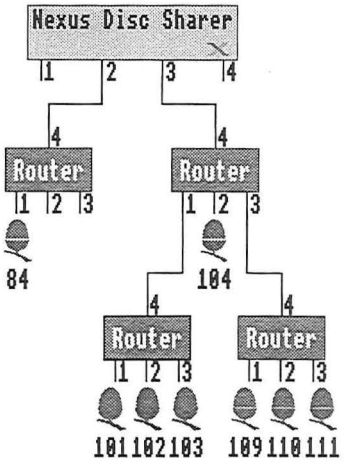
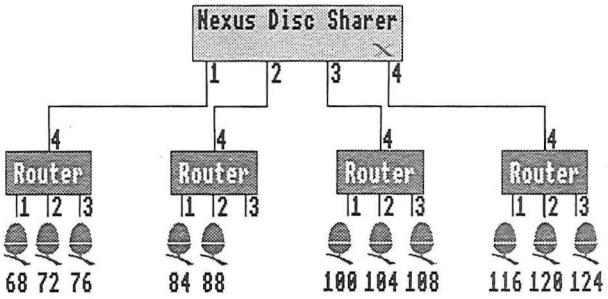
```
01          Disc sharer version 2.16
            Drive 0 (173Mb): FUJITSU M2614S 0607
  50        Hub version 0.95
    54      Archimedes version 3.20, station 84
    5C      BEN version 2.10, on Econet 1
            Remote nets:   1  47  50  64 102 105
  60        Router version 0.95
    64      Router version 0.95
      65    Archimedes version 3.20, station 101
      66    Archimedes version 3.20, station 102
      67    Archimedes version 3.20, station 103
    68      Archimedes version 3.20, station 104
    6C      Router version 0.95
      6D    Archimedes version 3.20, station 109
      6E    Archimedes version 3.20, station 110
      6F    Archimedes version 3.20, station 111
```




```
01          Disc sharer version 2.16
            Drive 0 (173Mb): FUJITSU M2614S 0607
  40        Router version 0.95
    44      Archimedes version 3.20, station 68
    48      Archimedes version 3.20, station 72
    4C      Archimedes version 3.20, station 76
  50        Hub version 0.95
    54      Archimedes version 3.20, station 84
    58      Archimedes version 3.20, station 88
    5C      BEN version 2.10, on Econet 1
            Remote nets:   1  47  50  64 102 105
  60        Router version 0.95
    64      Archimedes version 3.20, station 100
    68      Archimedes version 3.20, station 104
    6C      Archimedes version 3.20, station 108
  70        Router version 0.95
    74      Archimedes version 3.20, station 116
    78      Archimedes version 3.20, station 120
    7C      Archimedes version 3.20, station 124
```



If there are twelve stations connected to your Nexus disc sharer we recommend that only **eleven** of them are indicated on the PartEdit Cluster Map. Since eleven of the private disc partitions will be allocated to these eleven stations the twelfth station will always be attached to the twelfth private partition. On the other hand, if a computer is connected in a location other than those shown in the cluster map – e.g. a temporary connection for testing purposes, or because a mistake has been made in entering the Cluster Map – it will be able to attach to this twelfth station (provided the other computer has not already done so). Clearly if there are fewer than 12 stations on the cluster there will always be a spare private partition for a computer connected in an 'undeclared' position.

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